### **REMARKS**

### Status of the claims

Claims 1-20 are pending. The rejections of claims 1-12 and 19-20 under 35 U.S.C. 112, first paragraph, of claims 1-3, 6-11, 13-15, and 17-19 under 35 U.S.C 102(b) and of claims 5 and 12 under 35 U.S.C. 103(a) are affirmed by The Board of Patent Appeals and Interferences. The rejections of claims 4, 16 and 20 under 35 U.S.C 102(b) and of claims 1-20 under 35 U.S.C. 103(a) are reversed. Claims 1-2, 8-9, 13-14, and 19 are amended herein. Claims 4, 11, 16 and 20 are canceled. No new matter is added.

### Claim amendments

Independent claims 1, 8, 13, and 19 are amended to overcome rejection under 35 U.S.C. 102(b). Applicants have amended these claims to delete the word "immediately" from the claim language in claims 1, 8 and 19 and to incorporate the dosage limitations of claims 4, 11, 16, and 20. Claims 2, 9 and 14 are amended to correct claim language by deleting the phrase "selected from". No new matter is added in these amendments.

# The 35 U.S.C. §112, first paragraph, rejection

Claim 1-12 and 19-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter that was not described in the specification to reasonably convey to the skilled artisan that the inventor had possession of the claimed subject matter. Applicant respectfully traverses this rejection.

Specifically, the Examiner contends that there is no support for the recitation of "immediately upon" oral administration. Applicant has amended claims 1, 8 and 19 to delete the word "immediately" from the claim language and has canceled claims 4, 11 and 20. Accordingly, Applicant respectfully requests that the rejection of claims 1-12 and 19-20 under 35 U.S.C. 112, first paragraph, be withdrawn.

### The 35 U.S.C. §102(b) rejection

As affirmed, claims 1-3, 6-11, 13-15, and 17-19 are rejected under 35 U.S.C. §102(b) as being anticipated by **Cummins**. Applicant respectfully traverses this rejection.

In the Decision on Appeal, The Board of Patent Appeals and Interferences (BPAI) agreed with the Examiner's assessment that **Cummins** teaches all the elements of the methods recited in the

instant application with the exception of the high dosage ranges of the orally administered interferon recited in dependent claims 4, 16 and 20. As originally, filed the lower end of the dosage range of dependent claim 11 overlapped the teaching provide in **Cummins** which Applicants have narrowed herein as discussed *supra*. Also, as discussed supra, Applicants have amended independent claims 1, 8, 13 and 19 to include the limitations of these ranges and have canceled claims 4, 11, 16, and 20.

6

In view of these amendments **Cummins** no longer teaches every element, specifically, the higher dosages recited in claims 4, 16 and 20. Claims 2-3, 5-7, 9-10, 12, 14-15, and 17-18 depend from claims 1, 8 and 13. These claims further limit the invention with respect to types of neoplastic cells, where they are treated, the concentration of the actinonin and the specific killing effect exhibited. Applicant submits that if, as amended, independent claims 1, 8 and 13 are not anticipated by **Cummins**, then neither are dependent claims 2-3, 5-7, 9-10, 12, 14-15, and 17-18 anticipated thereby.

For a valid §102 rejection, the prior art references must contain each element of the claimed invention. Absent teachings of the specific dosage ranges recited herein, **Cummins** doe not teach

each element of Applicant's claimed invention. Therefore, as these references are not valid prior art against the instant application under 35 U.S.C. §102 and in view of the preceding amendments and remarks, Applicant respectfully submits that the cited reference does not anticipate claims 1-3, 6-11, 13-15, and 17-19 under 35 U.S.C. §102(b). Accordingly, Applicants respectfully request that the rejections of claims 1-3, 6-11, 13-15, and 17-19 under 35 U.S.C. §102(b) be withdrawn.

# The 35 U.S.C. §103(a) rejection

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As affirmed, claims 5 and 12 are rejected under 35 U.S.C. §103(a) as being obvious over **Cummins**. Applicant respectfully traverses this rejection.

Claims 5 and 12 depend from independent claims 1 and 8, respectfully, and limit the oral administration of the interferon to every other day. As amended and as discussed *supra*, claims 1 and 8 recite a specific dosage range which is not anticipated by **Cummins**. Therefore, if the claims, with respect to dosage amount, are not anticipated by **Cummins**, then neither can the claims be obvious over **Cummins** when including the further limitation of time of administration. Thus, in view of the above claim amendments and

remarks, the invention as a whole was not obvious to one of ordinary skill in the art at the time the invention was made. Accordingly, Applicants respectfully request that the rejection of claims 5 and 12 under 35 U.S.C. §103(a) be withdrawn.

1

This is intended to be a complete response to the Decision on Appeal mailed September 6, 2002. If any issues remain outstanding, the Examiner is respectfully requested to telephone the undersigned attorney of record for immediate resolution. Please debit any required fees from Deposit Account No. 07-1185 on which the undersigned is allowed to draw.